

Abstract

A method for producing a Group III element nitride single crystal, which comprises reacting at least one Group III element selected from the group consisting of gallium(Ga), aluminum(Al) and indium(In) with nitrogen(N) in a mixed flux of sodium(Na) and at least one of an alkali metal (except Na) and an alkaline earth metal. The method allows the production, with a good yield, of the single crystal of a group III element nitride which is transparent, is reduced in the density of dislocation, has a bulk form, and is large. In particular, a gallium nitride single crystal produced by the method has high quality and takes a large and transparent bulk form, and thus has a high practical value.